

Abstract

Around 20% of Australian workers are affected by a non-compete restraint (NCR). An NCR prevents a worker from joining a competitor of their current employer for a period after their employment is terminated. Though ostensibly necessary to protect sensitive business information and relationships, NCRs have recently faced an increasing level of criticism in Australia and overseas, due to their deleterious effects on labour mobility and dynamism. This article considers whether banning NCRs, either entirely or below an income threshold, would be likely to increase Australia's real GDP. It conducts this evaluation via a comparative study with the United States, where empirical evidence on the economy-wide effects of NCRs is more plentiful. Based on that evidence, it recommends that Australia ban NCRs below the high-income threshold set out in the Fair Work Act 2009.

I Introduction

On 23 March 2023, Australia's Federal Assistant Minister for Competition the Hon Dr Andrew Leigh MP cited a *"growing body of evidence...that non-compete clauses hamper job mobility and wage growth"*,¹ and called on the Treasury to provide *"advice on the competitive impacts of non-compete clauses and any action the Australian Government should take in response."*²

Since that call to action, worker non-compete restraints (**NCRs**) have faced increasing levels of criticism in Australia. In August 2023, the Australian Government announced that NCRs would be a key policy topic for the Treasury's Competition Review.³ In March 2024, the House of Representatives Standing Committee on Economics recommended that the Treasury *"consider the appropriateness of constraints and bans on non-compete clauses"*.⁴

On 26 April 2024, Treasurer the Hon Dr Jim Chalmers MP expressed a *"really strong interest*

* UNSW BEc/LLB(Hons). I am grateful to Deborah Healey for her supervision and advice, and Rosalind Dixon for her helpful comments. All mistakes are my own.

¹ Andrew Leigh, 'Opinion piece: How uncompetitive markets reduce wages', *Australian Treasury* (Article, 23 March 2023) <<https://ministers.treasury.gov.au/ministers/andrew-leigh-2022/articles/opinion-piece-how-uncompetitive-markets-reduce-wages>>.

² Ibid.

³ Australian Treasury, *Non-competes and other restraints: understanding the impacts on jobs, business and Productivity* (Issues Paper, April 2024) <<https://treasury.gov.au/sites/default/files/2024-04/c2024-514668-issues-paper.pdf>> ('**Treasury Issues Paper**').

⁴ House of Representatives Standing Committee on Economics, Parliament of Australia, *Better Competition, Better Prices: Report on the inquiry into promoting economic dynamism, competition and business formation* (Report, March 2024) [4.91] <https://parliinfo.aph.gov.au/parlInfo/download/committees/reportrep/RB000263/toc_pdf/BetterCompetition_BetterPrices.pdf>.

in dealing with non-competes, as they have gotten out of control".⁵ As of May 2024, the Competition Review is currently accepting submissions on whether Australia's current NCR laws are fit for purpose.⁶ But what are NCRs, and why are they suddenly the subject of such intense scrutiny?

A worker NCR is a contractual promise from an employee to their employer, or from an independent contractor to their principal,⁷ that for an agreed period after the termination of their contractual relationship the worker will not create or join a competing business. They typically appear as clauses within contracts of employment and are ostensibly used to prevent ex-employees from improperly taking confidential information, clients or employees to a competitor. Recent evidence from the e61 institute and the Australian Bureau of Statistics (**ABS**) indicates that around 1 in 5 Australian workers are subject to an NCR,⁸ and 1 in 5 employers use them.⁹

Australia's investigation into NCRs follows significant movement in other common law jurisdictions towards curtailing or outright eliminating the use of worker NCRs. Most notably, on 5 January 2023, the United States Federal Trade Commission (**FTC**) formally proposed a Draft Rule that would ban all worker NCRs in the US.¹⁰ After an extended consultation period, the FTC followed through on 23 April 2024 with a Final Rule banning almost all NCRs, effective 120 days after the Final Rule's publication in the US Federal Register.¹¹ The United Kingdom (**UK**) Government has come to a similar though less absolutist position, and

⁵ Shane Wright, 'Non-compete clauses in the gun as way to boost wages and economy', *Sydney Morning Herald* (online, 26 April 2024) <<https://www.smh.com.au/politics/federal/non-compete-clauses-in-the-gun-as-way-to-boost-wages-and-economy-20240426-p5fmql.html>>.

⁶ Treasury Issues Paper (n 3).

⁷ *Isaac v Dargan Financial Pty Ltd* (2018) 98 NSWLR 343, [69] (*'Isaac v Dargan'*).

⁸ Dan Andrews and Bjorn Jarvis, "The ghosts of employers past: how prevalent are non-compete clauses in Australia?" (Micro Note, e61 Institute, June 2023) 2 <<https://e61.in/wp-content/uploads/2023/06/The-ghosts-of-employers-past-how-prevalent-are-non-compete-clauses-in-Australia.pdf>>;

⁹ Australian Bureau of Statistics, *Restraint Clauses, Australia, 2023* (21 February 2024) <<https://www.abs.gov.au/articles/restraint-clauses-australia-2023>> (*'ABS Restraint Clauses Report'*).

¹⁰ *Non-Compete Clause Rule*, 88 Fed Reg 3482 (19 January 2023) (*'FTC Draft Rule'*).

¹¹ FTC, 'FTC Announces Rule Banning Noncompetes' (Press Release, 23 April 2024) <<https://www.ftc.gov/news-events/news/press-releases/2024/04/ftc-announces-rule-banning-noncompetes>>; FTC, *Non-Compete Clause Rule* (Final Rule, 23 April 2024) <https://www.ftc.gov/system/files/ftc_gov/pdf/noncompete-rule.pdf> (*'FTC Final Rule'*).

on 12 May 2023 formally announced its intention to limit the duration of most worker NCRs to a maximum of 3 months.¹²

This global policy shift follows the emergence “*in the last two decades*” of considerable empirical research and natural experimental evidence, particularly from the United States, on “*how non-compete clauses affect competition in labor markets and product and service markets*”.¹³ Unfortunately, no natural experiments on NCRs have been conducted in Australia, forcing Australian policymakers to rely primarily on cross-jurisdictional comparisons. This article argues that the US is our best source of evidence as to the aggregate economic effects of NCRs, as long as appropriate adjustments are made for the differences in US and Australian labour markets and NCR laws. On the basis of the US evidence, it recommends a ban on NCRs below the high income threshold set by the *Fair Work Act 2009* (**FWA**).¹⁴

This article is structured as follows: Section II explains the current law on NCRs in Australia, identifies some potential options for reform, and establishes why real GDP is the most appropriate criterion for assessing the likely economic effects of NCR reform. Section III sets out the theoretical evidence as to the effects of NCRs on three key determinants of real GDP, namely aggregate wages, business profits, and consumer prices. Section IV argues that there is no credible empirical evidence on the aggregate effects of NCRs in Australia, and that the best-available source of evidence is comparative analysis with the United States. It then reviews the empirical evidence from the US and considers its application to Australia. Section V evaluates the options for reform, identifies the limitations of this article, and concludes.

¹² Department for Business and Trade, United Kingdom Government, *Non-Compete Clauses* (Report, 12 May 2023) 4

<https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1156211/non-compete-government-response.pdf>.

¹³ FTC Draft Rule (n 10) 3484.

¹⁴ Currently AU\$167,500: ‘High income threshold amounts’, *Fair Work Ombudsman* (Web Page) <<https://library.fairwork.gov.au/viewer/?krm=K600486>>; FWA s 382.

II NCRS IN AUSTRALIA

A Australia's Current Laws

NCRs are regulated by the common law restraint of trade doctrine in Australia, alongside other post-contractual restrictions such as non-solicits and non-disclosure agreements. All post-contractual restraints must be “reasonable”, the test for which was first articulated in its contemporary form by Lord McNaughten in *Nordenfelt v Maxim Nordenfelt Guns and Ammunition Co Ltd* (***Nordenfelt***):¹⁵

*“It is a sufficient justification, and indeed it is the only justification, if the restriction is reasonable—reasonable, that is, in reference to the interests of the parties concerned and reasonable in reference to the interests of the public...”*¹⁶

The restraint must protect legitimate business interests such as confidential information and business relationships, and cannot protect against “mere competition.”¹⁷ The onus of proving reasonableness falls on the person seeking to enforce the restraint,¹⁸ and reasonableness is assessed at the time of the making of the covenant,¹⁹ though reasonably foreseeable events can be considered.²⁰ When a contract contains a non-solicit restriction and/or non-disclosure restriction as well as an NCR, the court will consider whether these less invasive restraints are sufficient on their own. However, courts recognise that these restraints are more difficult to monitor and enforce, and therefore may be inadequate.²¹ NCRs are not limited to workers, but employee NCRs face greater judicial scrutiny than NCRs within a partnership or relating

¹⁵ [1894] AC 535, cited in JD Heydon, *The Restraint of Trade Doctrine* (LexisNexis, 4th ed, 2018) 1.

¹⁶ *Nordenfelt* (n 15) 565, cited in *Amoco Australia Pty Ltd v Rocca Bros Motor Engineering Co Pty Ltd* (1973) 133 CLR 288, 305 (Walsh J) & 317 (Gibbs J).

¹⁷ *Isaac v Dargan* (n 7) [64].

¹⁸ *Ibid* [75]-[76].

¹⁹ *Lindner v Murdock's Garage* (1950) 83 CLR 628, 653 (Kitto J).

²⁰ *Ibid*.

²¹ *Red Bull Australia Pty Ltd v Stacey* [2011] NSWSC 1212, [35]; *Janala Pty Ltd v Hardaker (No 3)* [2023] NSWSC 446, [54]-[55].

to the sale of a business,²² and this greater scrutiny is generally also applied to independent contractor NCRs.²³

A restraint must be reasonable as to scope of activities covered, geographical ambit, and duration.²⁴ However, the common law “blue pencil” rule of severability allows for an unreasonably broad restraint to be read down to an enforceable restraint, if this can be achieved solely by the deletion of words.²⁵ This doctrine has led contract drafters to express NCRs in cascading or several terms,²⁶ such that when a more expansive restraint is found unreasonable, a smaller restraint can still apply.

The *Restraint of Trade Act 1976* (NSW) (**‘ROTA’**) obviates the need for this cascading structure in NSW. *ROTA* s 4(1) provides that “A restraint of trade is valid to the extent to which it is not against public policy, whether it is in severable terms or not”. As explained in *Isaac v Dargan*, NSW Courts will therefore use the following process: “First, the court determines whether the alleged breach (independently of public policy considerations) does or will infringe the terms of the restraint properly construed. Next, the court determines whether the restraint, so far as it applies to that breach, is contrary to public policy.”²⁷

However, to ensure that NCR drafters “attempt...to provide a restraint” within the “bounds of reason”,²⁸ rather than drafting as widely as possible in reliance on s 4(1), *ROTA* s 4(3) permits the NSW Supreme Court to order that a restraint be wholly or partly invalid by reason of “a manifest failure by a person who created or joined in creating the restraint to attempt to make the restraint a reasonable restraint”.

²² *Isaac v Dargan* (n 7) [67].

²³ Heydon (n 15) 93; *Isaac v Dargan* (n 7) [73].

²⁴ *Butt v Long* (1953) 88 CLR 476, 486; *Seven Network (Operations) Ltd v Warburton (No 2)* [2011] NSWSC 386, [59].

²⁵ See, eg, *Stockfield v Hendon* [2021] VSC 133, [85]; *Just Group Ltd v Peck* (2016) 334 ALR 162, [39].

²⁶ See, eg, *Hanna v OAMPS Insurance Brokers Ltd* [2010] NSWCA 267; *Auto Parts Group Pty Ltd v Cooper* [2015] QSC 155, [58]-[65].

²⁷ *Isaac v Dargan* (n 7) [61].

²⁸ New South Wales Law Reform Commission, *Covenants in Restraint of Trade* (Report No 9, 1970) [44] <<https://www.lawreform.justice.nsw.gov.au/Documents/Publications/Reports/Report-09.pdf>>.

The common law doctrine is almost entirely unaffected by federal competition or labour law. The combined effect of sections 4M and 51(2)(b) of the *Competition and Consumer Act 2010* (Cth) (**CCA**) is that the common law restraint of trade doctrine operates independently of the CCA,²⁹ and can strike down restraints that are not prohibited by CCA,³⁰ as was done in *Adamson v New South Wales Rugby League Ltd*.³¹ The FWA makes no mention of NCRs, and NCRs do not appear in any Modern Awards.³² Furthermore, NCRs are not “permitted matters” in for inclusion in enterprise bargaining agreements,³³ and therefore only validly appear in individual employment contracts.

B Options for Reform

This paper compares three options for the regulation of NCRs in Australia. It assumes that any reform would be implemented federally under the CCA or FWA, and would be constitutionally valid.

Option 1: Blanket Ban

Australia implements an outright federal ban on all worker NCRs. The FTC has ruled in favour of implementing such a ban across the US (though this ruling is subject to constitutional challenge),³⁴ though a few US states including California already have blanket bans in place.³⁵

Option 2: Income-Threshold Ban

Australia bans worker NCRs below a certain income threshold, while continuing to apply the

²⁹ *Peters (WA) Ltd v Petersville Ltd* (2001) 205 CLR 126, [32].

³⁰ *Ibid.*

³¹ (1991) 31 FCR 242.

³² According to search for “compete”, “solicit” and “restraint” with *Category* filtered for *Awards* on the Fair Work Commission’s document search function: ‘Document Search’, *Fair Work Commission* (Web Page) <https://www.fwc.gov.au/document-search?q=*&options=SearchType_1%2CSortOrder_decision-date-desc&facets=DocumentCategory_Awards>.

³³ *Application by 3D Earthmoving 2017 Pty Ltd* [2018] FWC 623, [93]-[107].

³⁴ *FTC Final Rule* (n 11); Amelia Pollard, ‘Employee non-compete ban challenged in court by US business groups’, *Financial Times* (online, 25 April 2024) <<https://www.ft.com/content/72a91385-0681-4323-884e-2ebb190da236>>.

³⁵ ‘US non-compete agreement laws by state’, *SixFifty* (Web Page) <<https://www.sixfifty.com/resource-library/non-compete-agreement-by-state/>>.

status quo reasonableness doctrine above that threshold. Nine US states and the District of Columbia (DC) currently implement NCR bans below various income thresholds.³⁶

Option 3: Status Quo

Australia continues to regulate NCRs under its current laws, as outlined in Section II(A).

C Evaluative Criterion for Reform

This paper will evaluate each reform for its likely effect on Australia's economic efficiency, assessed via the metric of real GDP. Although labour productivity "*is the most used indicator for economic efficiency*",³⁷ using labour productivity instead of GDP might fail to capture a central function of NCRs – that they temporarily lock workers out of their industry of specialisation. The catch arises because labour productivity measures "*real GDP per hour worked*" (emphasis added).³⁸

Upon being restrained from working in their chosen industry, some workers might temporarily move to less productive jobs in other industries, which would be captured as a loss in labour productivity. However, some NCR-bound workers might temporarily exit the workforce *entirely*. These workers would simply no longer factor into the productivity equation (since their hours worked = 0). For example, an average-productivity worker leaving the labour market for six months due to an NCR would *not change labour productivity at all*. Thus, measuring by labour productivity could fail to fully capture the potentially considerable economic inefficiencies resulting from the involuntary removal of NCR-bound workers from the workforce.

³⁶ Ibid.

³⁷ Australian Treasury, *Productivity* (Web Page, 21 July 2023) <<https://treasury.gov.au/policy-topics/measuring-what-matters/dashboard/productivity>>.

³⁸ Australian Bureau of Statistics, *Labour productivity: Labour Statistics: Concepts, Sources and Methods* (24 November 2023) <<https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2023/concepts-and-sources/labour-productivity>>.

In contrast, real GDP captures the effects of NCRs on both labour productivity *and* working hours, since by rearranging the equation for labour productivity,³⁹ real GDP can be expressed as follows:

$$\text{Real GDP} = \text{Labour productivity} * \text{Total Hours Worked}$$

As Section III will explain, NCRs are most likely to impact real GDP via their effects on worker wages, business profitability, and potentially also consumer prices.

III THEORETICAL EVIDENCE ON THE EFFECTS OF NCRS

In order to understand the theory of how NCRs might affect economic efficiency (and therefore real GDP), it is useful to distinguish between their **direct effects** on the parties to an NCR agreement and their **indirect effects** on other workers, businesses, and consumers.

A Direct Effects

Signing an NCR can have both negative and positive direct effects on a **promisor worker** (who agrees to be bound by an NCR). An NCR impedes a promisor worker's job mobility and prevents them from leveraging the threat of departing to another firm in negotiating wage raises, because such a threat is far less credible from a worker who cannot legally join a rival.⁴⁰ An economically rational promisor worker will not accept these costs without being fully compensated for them, in the form of a higher starting salary, additional training, and other benefits (collectively, an **NCR premium**).⁴¹ An NCR will have corresponding direct effects on a **promisee business** (which receives the benefit of an NCR): NCRs reduce the risk to the business of having its sensitive information misused or business relationships poached. Furthermore, NCRs may save labour costs for the promisee business, by limiting

³⁹ Labour Productivity = Real GDP/Total Hours Worked: Ibid.

⁴⁰ Matthew S Johnson, Kurt J Lavetti and Michael Lipsitz, 'The Labor Market Effects of Legal Restrictions on Worker Mobility' (Research Paper, 13 October 2021) 7-9 <<https://ssrn.com/abstract=3455381>> ('**Labor Market Effects 2021 Version**').

⁴¹ Ibid.

the promisor worker's job mobility and future wage bargaining leverage. In exchange for these benefits, the promisee business must pay the NCR premium.

If workers and businesses were both perfectly rational, **NCR transactions** (where a worker and business agree to an NCR) would only occur when the transaction provides a direct net benefit to both the promisor worker and the promisee business. Of course, this is an unrealistic assumption: Workers often may not understand the consequences of an NCR or may lack the bargaining power to refuse one,⁴² and may not therefore be fully compensated for its long-term costs. In these circumstances, NCRs will result in a direct net loss to promisor workers. On the assumption that businesses tend to behave with greater economic rationality, have better access to legal advice, and have greater bargaining power than workers, businesses are far less likely to enter a detrimental NCR transaction.

NCRs may lead to direct efficiency gains by resolving the "*holdup problem*", arising when firms are "*reluctant to invest in developing valuable information or specialized training*" because workers can simply leave to a competitor with the information or training.⁴³ NCRs provide security to the business that this won't happen, thereby "*encourag[ing] employers to make these fragile but important productivity enhancing investments*".⁴⁴ The same logic applies to giving NCR-bound workers responsibility for the management of important client relationships. These productivity gains can theoretically be split between the promisor worker and the promisee business to their mutual benefit. Workers may also develop firm-specific human capital with tenure (such as familiarity with the firm's workflow and IT systems),⁴⁵ such that NCRs protect intra-firm productivity gains.

⁴² Ibid 9.

⁴³ Evan P Starr, J J Prescott and Norman D Bishara, 'Noncompete Agreements in the U.S. Labor Force' (Research Paper, 12 October 2020) 1-2 <<https://ssrn.com/abstract=2625714>>.

⁴⁴ Ibid.

⁴⁵ Dan Andrews and David Hansell, "Productivity-Enhancing Labour Reallocation in Australia" (Working Paper No 2019-06, Australian Treasury, November 2019) 16 <https://treasury.gov.au/sites/default/files/2019-11/p2019-37418-productivity_0.pdf>.

However, NCRs may cause allocative inefficiency by incentivising workers and businesses to remain into suboptimal *worker-job matches (matches)*.⁴⁶ At the time of signing an NCR, workers and business do not know for certain whether they are well-suited for each other (in terms of maximising their joint productive output). By the time a promisor worker can properly assess whether their match is suboptimal, the worker is directly prevented by their NCR from going to work elsewhere. To some degree, an NCR may also disincentivise a promisee business from looking for a better match, as the longer the business retains a promisor worker, the more money it saves from that worker's lack of leverage in salary negotiations.⁴⁷

B Indirect Effects

Since NCRs lock some firms and workers together, NCRs reduce the total number of prospective candidates and job openings in the labour market, known as “thinning” the market.⁴⁸ This is predicted to increase job searching costs,⁴⁹ and to reduce the frequency of matches for *other* workers and firms.⁵⁰ This **spillover effect** reduces the allocative efficiency of the labour market, and economic theory suggests that the cost of this inefficiency primarily falls upon workers, in the form of lower equilibrium wages.⁵¹ NCRs may also increase labour market concentration by preventing promisor workers from starting their own rival businesses.⁵² This may decrease wages, increase incumbent firm profits, and reduce overall productivity.⁵³

⁴⁶ FTC Draft Rule (n 10) 3485.

⁴⁷ Johnson, Lavetti and Lipsitz, ‘Labor Market Effects 2021 Version’ (n 40) 9.

⁴⁸ Ibid.

⁴⁹ Evan Starr, Justin Frake, Rajshree Agarwal, ‘Mobility Constraint Externalities’ (2019) 30(5) *Organization Science* 961, 961.

⁵⁰ Johnson, Lavetti and Lipsitz, ‘Labor Market Effects 2021 Version’ (n 40) 9; FTC Draft Rule (n 10) 3485.

⁵¹ Li Gan and Qi Li, “Efficiency of thick and thin markets” (2016) 192 *Journal of Econometrics* 40, 48.

⁵² Jessica Jeffers, ‘The Impact of Restricting Labor Mobility on Corporate Investment and Entrepreneurship’ (Working Paper No 275, The University of Chicago Booth School of Business, 3 January 2018), cited in Johnson, Lavetti and Lipsitz, ‘Labor Market Effects 2021 Version’ (n 40) 10.

⁵³ David Arnold, ‘Mergers and Acquisitions, Local Labor Market Concentration, and Worker Outcomes’ (Research Paper, 7 April 2020) <<https://ssrn.com/abstract=3476369>>.

NCRs also have two potential countervailing indirect effects on consumer prices. Since NCRs may inhibit entrepreneurialism by preventing promisor workers from starting their own businesses,⁵⁴ NCRs may reduce product market competition and increase consumer prices. However, NCRs also depress worker wages, which reduces the cost of production. In competitive product markets, some of these savings may be passed on to consumers in the form of lower prices.

C Overall Implications

NCR reform will inherently involve a tradeoff between different forms of economic efficiency, with potential impacts on aggregate wages, business profits, and consumer prices. In general, allowing NCRs may increase intra-firm productive efficiency by resolving the holdup problem and protecting firm-specific human capital. The degree to which these efficiency gains flow to workers or consumers will depend on the degree of competition in the relevant labour and product markets. However, prohibiting NCRs may improve allocative efficiency in the labour market and drive competition in product markets through increased entrepreneurialism.

IV EMPIRICAL EVIDENCE ON THE EFFECTS OF NCRS

A Necessity of Comparative Study

Given the ambiguous and countervailing theoretical effects of NCRs on aggregate wages, profits, and consumer prices, we will require credible empirical evidence as to the likely net effects of NCRs on these metrics. This article argues that credible evidence cannot be derived from Australian data alone, because Australia is infertile ground for causal economic research in relation to NCRs.

⁵⁴ Jeffers (n 52).

1 *Credible Sources of Empirical Evidence*

In empirical research, economists aim to conduct natural experiments that credibly identify and measure causal relationships, using controls that limit the risk of omitted variable bias and reverse causality to the extent possible in a real-world setting.⁵⁵ For example, there is a long history of natural experiments “*exploiting variation across U.S. states to get at causal relationships in the field...of labor*”,⁵⁶ usually where one of two similar US States changes its labour laws. Although States may have different pre-treatment measures of various labour market metrics (like average wages, hours worked, etc.), they will often share underlying trends in how these measures change over time. This allows researchers to conduct a differences-in-differences (‘**DID**’) analysis,⁵⁷ assessing whether “*deviations from trend relate to changes in policy*” in the treatment State.⁵⁸

Cross-sectional study, in contrast, struggles to control for “*reverse causation or selection on unobservables*” in trying to find causal relationships.⁵⁹ An example relevant to NCRs is that businesses with more profitable trade secrets might both pay more *and* use NCRs more frequently. Drawing a causal link between NCRs and wages could therefore be an example of unobserved variable bias, since the unmeasured (and practically unmeasurable) variable of “profitability of trade secrets” might be the underlying cause of their positive correlation.

2 *Paucity of Evidence in Australia*

Given the limitations on cross-sectional study, we should strongly prefer natural experimental evidence on the economic effects of different NCR laws in Australia.

Unfortunately, the *ROTA* has been the only State-level deviation from an Australia-wide

⁵⁵ Joshua D Angrist and Jörn-Steffen Pischke, ‘The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics’, (2010) 24(2) *Journal of Economic Perspectives* 3, 4-5 (**‘The Credibility Revolution’**).

⁵⁶ *Ibid* 5.

⁵⁷ See, eg, Joshua D Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist’s Companion* (Princeton University Press, 2009) ch 5.2.

⁵⁸ Angrist and Pischke, ‘The Credibility Revolution’ (n 55) 14.

⁵⁹ See, eg, Starr, Prescott and Bishara, ‘Noncompete Agreements in the U.S. Labor Force’ (n 43) 10.

common law restraint of trade doctrine,⁶⁰ and there is strong reason to believe that the *ROTA* did not change the usage or legal enforceability of NCRs in NSW substantially enough to form a reliable basis for the prediction of how an NCR ban might affect the Australian economy.

Firstly, the NSW Law Reform Commission report recommending the implementation of the *ROTA* did not indicate that the *ROTA* would make it substantially easier to create a legally enforceable NCR in NSW. To the contrary, the report claimed that the reform would “*extend only marginally...what can now be achieved by detailed prolixity of expression*”, referring to the use of lengthy cascading restrictions.⁶¹ Secondly, US empirical evidence also suggests that the *ROTA* had only a marginal impact on NCR enforceability. In 2023, Johnson, Lavetti, and Lipsitz assessed the effect of US State-level changes to NCR enforceability on worker earnings.⁶² “Enforceability” was measured by seven legal indicia, including a State’s severability doctrine for unreasonably broad NCRs.⁶³ The study found a substantial and statistically significant negative relationship between changes to overall NCR enforceability and wages, and between some other individual indicia and wages. However, it found *no statistically significant relationship* between legal changes to severability and worker earnings.⁶⁴

If natural experimental study is not feasible, another option may be to try to generalise economic intuitions from caselaw. Some Australian legal commentators have suggested that since NCRs are “*notoriously difficult to enforce*” in Australia,⁶⁵ the common law may already strike the right balance between business and worker interests. However, it is highly unlikely

⁶⁰ *Isaac v Dargan* (n 7) [59].

⁶¹ New South Wales Law Reform Commission (n 28) [38].

⁶² Matthew S Johnson, Kurt Lavetti and Michael Lipsitz, ‘The Labor Market Effects of Legal Restrictions on Worker Mobility’ (Working Paper No 31929, National Bureau of Economic Research, December 2023) <<https://www.nber.org/papers/w31929>> (**‘Labor Market Effects 2023 Version’**).

⁶³ *Ibid* 11-12 & 89.

⁶⁴ *Ibid* 78 & 89.

⁶⁵ Shivchand Jhinku et al, ‘Australia: Breaking the chains – ACCC Review of non-compete and no-poach provisions in employment contracts’, *Herbert Smith Freehills* (Online, 27 March 2023) <<https://hsfnotes.com/employment/2023/03/27/australia-breaking-the-chains-accr-review-of-non-compete-and-no-poach-provisions-in-employment-contracts/>>.

that caselaw is a sound basis upon which to draw conclusions about how NCRs affect the economy.

Firstly, disputes about individual NCRs are concerned only with the marginal impact of the NCR in question on competition in labour and product markets, not the aggregate effects of all NCRs on competition.⁶⁶ As Heydon notes, “*There are few cases in which covenants valid as between the parties have been struck down as against the public interest*”,⁶⁷ partly because “*it is very difficult for most private individuals, or firms in agreements with individuals, to diminish competition sufficiently to create a tendency towards monopoly*”.⁶⁸ Courts therefore face the same issue with NCRs as competition regulators currently face with serial acquisitions – each individual transaction appears benign, but the aggregate impact on competition may be substantial.⁶⁹

Secondly, even if courts did typically achieve close to the utility-maximising result in NCR judgments, an estimated 99.99% of Australian NCRs never appear on the public record: The ABS reports that 1.3 million Australians changed jobs in the year ending February 2023,⁷⁰ and e61 Institute survey data indicates that 22% of Australians who recently changed jobs were bound by an NCR.⁷¹ We should therefore expect that around 22% * 1.3 million = 286,000 job leavers in the year ended February 2023 were subject to an NCR on their departure. Across the same period, I located only eight worker NCR judgments on Westlaw, covering ten workers in total.⁷² Published caselaw therefore captures a tiny fraction of actual

⁶⁶ FTC Draft Rule (n 10) 3495.

⁶⁷ Heydon (n 15) 199

⁶⁸ Heydon (n 15) 200.

⁶⁹ See, eg, Gina Cass-Gottlieb, ‘The role of the ACCC and competition in a transitioning economy’ (Speech, National Press Club, 12 April 2023) <<https://www.accc.gov.au/about-us/media/speeches/the-role-of-the-accc-and-competition-in-a-transitioning-economy-address-to-the-national-press-club-2023>>.

⁷⁰ Australian Bureau of Statistics, *Job Mobility, February 2023* (Catalogue No 6223.0, 30 June 2023).

⁷¹ Andrews and Jarvis (n 8) 2.

⁷² Determined by searching Westlaw for cases with term filter (“non compete” OR “post employment restraint”), date range 1 March 2022 to 28 February 2023, and manually categorising results. The cases were: *Janala Pty Ltd v Hardaker* [2022] NSWSC 822; *Label Manufacturers Australia Pty Ltd v Chatzopoulos* [2022] NSWSC 1059; *Allied Express Transport Pty Ltd v Braim* [2022] NSWSC 286; *Allied Express Transport Pty Ltd v Braim* (No 2) [2022] NSWSC 1298; *Airmaster Corporation Pty Ltd v Mohtadi* [2022] VSC 822; *Prowealth Corporation Pty Ltd v Property Investment Advisory Pty Ltd* [2022] QDC 257; *Talent Konnects Pty Ltd v Marvelli* [2022] WASC 128; *McMurphy v Employure Pty Ltd* [2022] NSWCA 201.

and potential worker NCR disputes in Australia. Furthermore, caselaw likely displays significant selection bias towards highly paid, risk-taking workers who can afford legal representation: NCR litigation is presumably more likely when the bound worker is bullish on the restraint being unenforceable, and in most NCR cases (including the eight cases listed above)⁷³ defendant workers are represented by privately funded solicitors and counsel.

Australian legal researchers Arup et al have significantly improved on caselaw analysis by interviewing employment lawyers with experience acting for workers and businesses at all stages of NCR negotiations and disputes (including initial drafting, settlements, and litigation), thereby gaining a more complete picture of how NCRs affect firms and workers.⁷⁴ However, employment lawyers can still only provide insight into the effects of NCRs on the subset of workers who obtain legal advice. For these reasons, economic analysis of the aggregate effects of NCRs requires a more comprehensive source of evidence than caselaw or lawyer interviews.

3 Comparative Study with the United States

Given the significant obstacles to obtaining credible domestic evidence on the aggregate economic consequences of NCRs, this paper seeks to identify jurisdictions in which natural experimental evidence *is* available, that are similar enough to Australia legally and economically that we can derive useful insight into the economic effects of NCRs in Australia. Some obvious potential candidates are high-income, economically liberal common law jurisdictions that have historically shared key elements of Australia's restraint of trade

⁷³ Ibid.

⁷⁴ Christopher Arup et al, 'Restraints of Trade: The Legal Practice' (2013) 36(1) *UNSW Law Journal* 1.

doctrine. These include the US,⁷⁵ the UK,⁷⁶ Singapore,⁷⁷ Hong Kong,⁷⁸ New Zealand,⁷⁹ and Canada.⁸⁰

Of these jurisdictions, the US is by far the most abundant source of credible empirical evidence on the economic effects of changing NCR enforceability. New Zealand, Singapore and Hong Kong have not implemented any changes to their NCR laws, and the UK's proposed 3-month time limit on NCRs has not yet been legislated.⁸¹ Ontario, Canada banned most worker NCRs from October 2021,⁸² but no studies have been published on the ban's economic effects. The US, on the other hand, has had many dozens of State-level changes to the enforceability of NCRs that are capable of DID study.⁸³

US evidence will therefore form the backbone of this article's economic analysis. It will be prudent to review the similarities and differences in the NCR laws and labour regulations of the US and Australia, as this will clarify how any reforms might affect Australia differently to the US.

⁷⁵ Office of Economic Policy, US Department of the Treasury, 'Non-compete Contracts: Economic Effects and Policy Implications' (Report, March 2016) 27
<https://home.treasury.gov/system/files/226/Non_Compete_Contracts_Economic_Effects_and_Policy_Implications_MAR2016.pdf>.

⁷⁶ *Jump Trading International Ltd v Couture* [2023] EWHC 1305, [21] (England and Wales High Court – King's Bench Division)

⁷⁷ *Tan Kok Yong Steve v Itochu Singapore Pte Ltd* [2018] SGHC 85, [38] (High Court of Singapore).

⁷⁸ *BFAM Partners (Hong Kong) Ltd v Mills* [2021] HKCFI 2904, [24] & [36]-[37] (Hong Kong Court of First Instance).

⁷⁹ *Water Babies International Limited v Williams* [2020] NZHC 1289, [71]-[74] (High Court of New Zealand).

⁸⁰ *Quick Pass Master Tutorial School Ltd v Zhao* [2022] BCSC 1846, [60] (Supreme Court of British Columbia).

Regarding income levels and economic freedom for listed countries, see: 'World Bank Country and Lending Groups', *World Bank* (Online Article) <<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>>; Fraser Institute, *Economic Freedom of the World: 2022 Annual Report* (Report, 8 September 2022) 8 <<https://www.fraserinstitute.org/sites/default/files/economic-freedom-of-the-world-2022.pdf>>.

⁸¹ Department for Business and Trade, United Kingdom Government (n 12) 5.

⁸² *Employment Standards Act*, SO 2000, c 41, s 67. See also Ministry of Labour, Immigration, Training and Skill Development, Government of Ontario, 'Non-compete agreements', *Ontario* (Web Page) <<https://www.ontario.ca/document/your-guide-employment-standards-act-0/non-compete-agreements>>.

⁸³ See, eg, Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 11.

NCR Usage

Australia and the US share similar rates of overall NCR usage: An estimated 22% of Australian workers who had recently left their jobs were subject to an NCR,⁸⁴ compared to an estimated 18% of US labour force participants.⁸⁵ However, while there is a consistent positive correlation between income level and NCR usage in the US,⁸⁶ the same is not true in Australia, where workers making between \$60,000-\$160,000 are more likely to have an NCR than workers making more than \$160,000.⁸⁷

In Australia, the e61 Institute found usage was highest amongst “*Managers*” at 39%, and lowest amongst “*Clerical and Administrative, Labourers*” at 14%.⁸⁸ The ABS had similar findings in its survey of employers, with 20.8% of employers using NCRs for at least some of their employees.⁸⁹ By sector, usage was highest at 39.6% in “*financial and insurance services*”, and lowest at 12.7% in “*retail trade*” and 13.3% in “*construction*”.⁹⁰ The likelihood of usage also increased with business size.⁹¹

The common thread between the e61 and ABS data is that while NCRs are more common for roles where one could reasonably justify them (managers and financial workers are highly likely to have access to sensitive business information, and to have the means to poach clients or colleagues), they are still used to a substantial degree in all industries, even where these justifications do not clearly hold.

These findings correspond strongly to those of Starr et al, who found that in the US, “*Noncompetes are more common for employees in technical jobs and industries and for employees who have access to valuable, confidential information. However, noncompetes*

⁸⁴ Andrews and Jarvis (n 8) 2.

⁸⁵ Starr, Prescott and Bishara, ‘Noncompete Agreements in the U.S. Labor Force’ (n 43).

⁸⁶ Ibid 22.

⁸⁷ Andrews and Jarvis (n 8) 2.

⁸⁸ Ibid.

⁸⁹ ABS *Restraint Clauses Report* (n 9).

⁹⁰ Ibid.

⁹¹ Ibid.

are relatively common in all occupations and industries and bind many employees without access to trade secrets or client information.”⁹²

NCR Enforceability

The relative legal enforceability of NCRs in Australia and the US is more difficult to assess. At a high level, the laws are quite similar: Like Australia, most US States use a “reasonableness inquiry” to determine whether an NCR is enforceable,⁹³ and will only protect legitimate interests including confidential information, employee and customer connections, rather than protecting against competition itself.⁹⁴ Most US States will also require the NCR to be reasonable in activities covered, time and location.⁹⁵ As in Australia,⁹⁶ most US States consider the commencement or continuation of employment to be sufficient consideration, whereas only a few states require the explicit provision of additional compensation.⁹⁷ Finally, most US States adopt either the blue pencil test or a rule similar to *ROTA* s 4(1).⁹⁸

Though a few US States are more enforcement friendly than Australia, for example, by extending legitimate interests to “protecting the employer's investment in training”,⁹⁹ a greater number of US States are less enforcement-friendly than Australia: Four States have banned NCRs entirely,¹⁰⁰ and nine States plus DC ban NCRs below certain income thresholds.¹⁰¹ Some States will render an entire NCR unenforceable if any part of it is unreasonable.¹⁰² Some require paid compensation during the post-employment restraint period.¹⁰³ Many limit NCR

⁹² Starr, Prescott and Bishara, ‘Noncompete Agreements in the U.S. Labor Force’ (n 43) 30.

⁹³ FTC Draft Rule (n 10) 3494-3495.

⁹⁴ FTC Draft Rule (n 10) 3495.

⁹⁵ Ibid.

⁹⁶ *Electroboard Administration v O’Brien* [1999] NSWCA 452; Heydon (n 15) 190.

⁹⁷ Evan Starr, ‘Consider This: Training, Wages, and the Enforceability of Covenants Not to Compete’ (2019) 72(4) *Industrial Labour and Relations Review* 783, 804; Norman D Bishara, ‘Fifty Ways to Leave Your Employer: Relative Enforcement of Covenants Not to Compete, Trends, and Implications for Employee Mobility Policy’ (2011) 13(3) *University of Pennsylvania Journal of Business Law* 751, 775-776 & 791-792.

⁹⁸ Starr (n 97) 789; Bishara (n 97) 776-777 & 792.

⁹⁹ *FTC Draft Rule* (n 10) 3495.

¹⁰⁰ *FTC Final Rule* (n 11) 289.

¹⁰¹ ‘US non-compete agreement laws by state’, *SixFifty* (Web Page) <<https://www.sixfifty.com/resource-library/non-compete-agreement-by-state/>>.

¹⁰² Starr (n 97) 789; Bishara (n 97) 776-777 & 792; *FTC Draft Rule* (n 10) 3495.

¹⁰³ *FTC Draft Rule* (n 10) 3494.

usage in certain industries, and some place a statutory limit on the permissible duration of an NCR.¹⁰⁴ In light of the above, this paper estimates that NCR enforceability is slightly higher in Australia than in the US.

Labour Protections and Job Mobility

Broadly, Australia is considered to have much stronger worker protections than the US.¹⁰⁵ For the past 50 years, Australia has had a far higher purchasing power parity (“PPP”)-adjusted real minimum wage than the US federal minimum wage.¹⁰⁶ Though 30 US States and the District of Columbia set wages above the US Federal minimum,¹⁰⁷ Australia’s minimum wage of AU\$23.23¹⁰⁸ per hour, adjusted for PPP, is roughly \$16.96 USD,¹⁰⁹ slightly higher than every US State minimum wage and roughly equal to that of DC.¹¹⁰ Australia also has far higher rates of government wage-setting and collective bargaining than the US: in May 2023, 23.2% of Australian employees had their wage set by an Award minimum, 34% by a Collective Agreement (**CA**), and only 38.7% by individual arrangement.¹¹¹ In comparison, the US only had 12.1% collective bargaining coverage in 2020.¹¹² Importantly, Awards provide a minimum standard for “*most people who work in Australia*”,¹¹³ since both

¹⁰⁴ Ibid; ‘US non-compete agreement laws by state’, *SixFifty* (Web Page) <<https://www.sixfifty.com/resource-library/non-compete-agreement-by-state/>>.

¹⁰⁵ Richard Mitchell et al, ‘The Evolution of Labour Law in Australia: Measuring the Change’ (2010) 23 *Australian Journal of Labour Law* 1, 24.

¹⁰⁶ Reg Hamilton and Matt Nichol, *One Hundred Years of Dynamic Minimum Wage Regulation: Lessons from Australia, the United Kingdom and the United States* (Working Paper, Employment Law Research Group, Central Queensland University, May 2020) 43 <<https://www.fwc.gov.au/documents/resources/comparative-minimum-wage-working-paper.pdf>>.

¹⁰⁷ Wage and Hour Division, US Department of Labor, ‘Consolidated Minimum Wage Table’, *United States Department of Labor* (Web Page, 1 January 2024) <<https://www.dol.gov/agencies/whd/mw-consolidated>>.

¹⁰⁸ *Re Annual Wage Review 2022-23* [2023] FWCFB 3500, 74 [207].

¹⁰⁹ Using the 2022 conversion rate (1.37) from: ‘PPP conversion factor, GDP (LCU per international \$) – Australia, United States’, *World Bank* (Web Page) <<https://data.worldbank.org/indicator/PA.NUS.PPP?locations=AU-US>>.

¹¹⁰ Wage and Hour Division, US Department of Labor (n 107).

¹¹¹ Australian Bureau of Statistics, *Employee Earnings and Hours, Australia* (Catalogue, May 2023) <<https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/employee-earnings-and-hours-australia/latest-release>>.

¹¹² Organisation for Economic Co-operation and Development, ‘Collective bargaining coverage’, *OECD.Stat* (Web Page, 21 May 2021) <<https://stats.oecd.org/index.aspx?DataSetCode=CBC>>.

¹¹³ ‘Awards’, *Fair Work Ombudsman* (Web Page) <<https://www.fairwork.gov.au/employment-conditions/awards>>.

CAs and individual agreements must render employees better off overall compared to the Award minimum.¹¹⁴

Economists have found that the broader the level of collective wage-setting, the “*more egalitarian the distribution of pay.*”¹¹⁵ Indeed, Australia has a substantially lower Gini coefficient than the US, at 0.318 compared to 0.377 in 2020.¹¹⁶ We should therefore expect that Australia has more equal wages across different firms than in the US. If true, then Australian workers should have fewer opportunities to obtain a meaningful pay increase from switching jobs,¹¹⁷ and ought to switch jobs less often. Consistent with this proposition, job mobility is far higher in the US than in Australia. The US Bureau of Labour Statistics reported that in the 2022 calendar year, 50.4% of the total labour force had been hired at a new job, and 33.6% of the labour force had quit a job.¹¹⁸ In comparison, for the year ended February 2023, the ABS estimates that 21.1% of employed Australians had been hired at a new job and just 10.6% of employed Australians had quit a job in the past year.¹¹⁹

This finding has significant implications for NCR reform. Since NCRs affect the economy by reducing worker mobility, if Australian workers have far less reason than US workers to move jobs *irrespective of whether they are NCR-bound*, NCR reform may be substantially less consequential for Australian workers and, by extension, for businesses and consumers.

¹¹⁴ FWA ss 144(4)(c) & 193.

¹¹⁵ Michael Wallerstein, ‘Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies’ (1999) 43(3) *American Journal of Political Science* 649, 672.

¹¹⁶ Most recent year where data for both countries is available: Organisation for Economic Co-operation and Development, ‘Income inequality’, *OECD Data* (Web Page) <<https://data.oecd.org/inequality/income-inequality.htm>>.

¹¹⁷ Alexander Hijzen, Wouter Zwysen and Mats Erik Lillehagen, ‘Job mobility, reallocation and wage growth’ (Working Paper No 254, Social, Employment and Migration Working Papers, Organisation for Economic Co-operation and development, 13 January 2021) 9 <<https://doi.org/10.1787/807becdf-en>>.

¹¹⁸ Calculated by multiplying the ‘annual average hires’ and ‘annual average quits’ rates, which represent average monthly percentages, by 12: Bureau of Labour Statistics, US Department of Labour, ‘Job Openings and Labor Turnover – January 2024’ (News Release, USDL-23-0434, 8 March 2023) <https://www.bls.gov/news.release/archives/jolts_03082023.pdf>

¹¹⁹ Quit rate calculated by multiplying the total ‘left or lost a job’ number (2.3m) by sum of ‘Left a Job’ percentages in Chart 10 (63.6%), and dividing that by total employment figure (13.8m): Australian Bureau of Statistics, *Job Mobility, February 2023* (Catalogue No 6223.0, 30 June 2023) <<https://www.abs.gov.au/statistics/labour/jobs/job-mobility/latest-release>>.

It will therefore be necessary to first review the US evidence, and then consider how it might apply differently in Australia.

B Empirical Evidence from the US

1 Effects on Wages and Hours Worked

US evidence clearly indicates that higher NCR enforceability reduces aggregate wages.

Johnson, Lavetti and Lipsitz found in 2023 that a federal US ban on NCRs would increase average worker earnings by 3.2-14.2%.¹²⁰ The authors identified the causal mechanisms by which NCRs reduce wages as being reduced returns to tenure on account of promisor workers' inability to leverage rival firm wage offers,¹²¹ and the reduction of job mobility for all workers via spillover effects.¹²² The study also found that the aggregate wage decrease from NCRs was *"almost entirely driven by declines in implied hourly wages"*,¹²³ indicative of allocative inefficiency and/or increased labour market power amongst businesses.

Effects by income level

The evidence for how an NCR ban would affect workers of different income levels is mixed. Johnson, Lavetti and Lipsitz found that NCR enforceability had *"little to no effect on earnings for non-college educated workers"*, but had a *"much stronger effect on earnings of college-educated workers."*¹²⁴ Wage increases from an NCR ban might therefore accrue primarily to relatively wealthy workers, since college-educated workers tend to benefit from the university wage premium.¹²⁵ However, a DID study by Lipsitz and Starr found that a ban on low-wage

¹²⁰ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 18.

¹²¹ Ibid 37.

¹²² Ibid 31.

¹²³ Ibid 3.

¹²⁴ Ibid 26.

¹²⁵ See, eg, Universities Australia, 'Graduate Wage Premium Remains – Despite Economic Challenges' (Media Release, 17 September 2018) <<https://www.universitiesaustralia.edu.au/media-item/graduate-wage-premium-remains-despite-economic-challenges>>; Jonathan James, 'The College Wage Premium' (Economic Commentary No 2012-10, Federal Reserve Bank of Cleveland, 8 August 2012) <<https://www.clevelandfed.org/en/publications/economic-commentary/2012/ec-201210-the-college-wage-premium>>.

NCRs in Oregon increased the average hourly wage by 2.2-3.1%,¹²⁶ and that this was not offset by a reduction in hours worked.¹²⁷

On balance, the latter study is likely more accurate. While Johnson, Lavetti and Lipsitz reviewed far more legal changes to NCR enforceability, their prediction of the effects of a complete ban was “*out-of-sample*” - they extrapolated the effect of a complete ban from a collection of relatively moderate changes to enforceability.¹²⁸ In contrast, Lipsitz and Starr directly studied the effects of an outright ban on low-wage NCRs.

Intuitively, the risk for lower-wage promisor workers of temporary unemployment from an NCR injunction may be unacceptably high under *any level of NCR enforceability* short of an outright ban. Hence, a study that primarily extrapolates from moderate changes to enforceability is likely to understate the true mobility and wage gains for lower-income workers from an outright ban.

However, the issue of whether NCRs reduce earnings for lower-income workers is further complicated by “*robust evidence that the employment effects of the minimum wage depend on the legal enforceability of [NCR]s*”.¹²⁹ In 2022, Johnson and Lipsitz found that when NCRs are completely unenforceable, minimum wage increases result in statistically significant reductions to overall employment levels,¹³⁰ but that the effect of minimum wage increases on unemployment is “*essentially zero in the state with highest [NCR] enforceability*.”¹³¹

Johnson and Lipsitz surmised that “*rendering [NCR]s unenforceable might decrease employment and firm formation among firms not productive enough to hire workers without an [NCR], reducing surplus*”.¹³² This finding can be explained by the holdup problem – a firm

¹²⁶ Michael Lipsitz and Evan Starr, ‘Low-Wage Workers and the Enforceability of Non-Compete Agreements’ (2021) 68(1) *Management Science* 143.

¹²⁷ *Ibid* 144.

¹²⁸ Johnson, Lavetti and Lipsitz, ‘Labor Market Effects 2023 Version’ (n 62) 3.

¹²⁹ Matthew Johnson and Michael Lipsitz, ‘Why Are Low-Wage Workers Signing Noncompete Agreements?’ (2022) 57(3) *Journal of Human Resources* 689, 720.

¹³⁰ *Ibid* 719-720.

¹³¹ *Ibid* 720.

¹³² *Ibid* 721.

will be more willing to invest in a low-productivity worker's training and development if they are guaranteed to receive a return on that investment.

Direct versus spillover wage effects

One of Johnson, Lavetti and Lipsitz's most significant findings was that spillover effects drive most of the net loss to worker wages from NCRs. Their paper studied the specific effects of State-level NCR law changes on border counties,¹³³ where a local economy operates across two adjacent US States. This allowed them to compare the economic consequences of a legal change in NCR enforceability in one State (the **changing State**) between workers employed on either side of the border. The analytical benefit of this method is that any wage reductions for workers employed in the **neighbouring State** (where the law has not been changed) can only be explained by spillover effects. According to the FTC, the study found that *"legal change in one State has an effect on the earnings of workers just across that State's border that is 76% as great as for workers in the State in which the law was changed"*.¹³⁴ The study also found that this spillover effect attenuated with distance from the changing State's border.¹³⁵

This finding indicates that spillover effects cause at least 76% of the aggregate wage reduction attributable to NCRs. However, it is unclear whether the 24% gap between the States is evidence of net-negative direct effects (impacting only NCR-bound workers in the changing State, hence the larger earnings effect relative to the neighbouring State). The gap could alternatively be the result of negative spillover effects in the changing State simply being greater than in the neighbouring State.

If the latter explanation is correct, it is possible that the aggregate direct effects of NCRs on wages are net neutral, or even positive.¹³⁶ There is no other clear evidence on this point: Although Starr, Prescott and Bishara found that NCRs are correlated with a 6.6% higher

¹³³ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 29-31.

¹³⁴ *FTC Final Rule* (n 11) 144, citing *ibid* 31.

¹³⁵ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 32.

¹³⁶ *Ibid* 34.

wage compared to otherwise similar jobs,¹³⁷ this was a cross-sectional study. As discussed in Section IV(A)(1), the finding is questionable due to the risk of “*reverse causation or selection on unobservables*”.¹³⁸ Ultimately, as Johnson, Lavetti and Lipsitz noted in the 2021 version of their paper, strict delineation between direct effects and indirect effects is “*irrelevant*” for assessing overall “*labour market outcomes*”,¹³⁹ since the aggregate effect of NCRs on wages is clearly negative.

2 Effects on Business Profits

There is qualified evidence that NCRs increase business profits. Younge and Marx conducted a DID analysis on Michigan’s legal change in 1985 from an outright ban on NCRs to a “reasonableness” test, and found that the change increased the share valuation of publicly listed companies registered in Michigan by 9%,¹⁴⁰ primarily driven by reduced labour turnover. This implies that a ban on NCRs could reduce share valuation by $\frac{9\%}{109\%} =$

8.26%. If we assume that share prices accurately represent the expected present value of all future profits, an NCR ban would reduce lifetime company profits by 8.26%.

There are several reasons why this result likely paints an exaggerated picture of the costs to businesses from banning NCRs. Firstly, Younge and Marx note that their study “*explores a short time window, and there may be deleterious effects of noncompetes in the long-run due to the limited circulation of talent and ideas*”.¹⁴¹ This line of argument was most famously advanced by Gilson, who posited that NCRs impede long-term innovation and productivity by preventing “*knowledge spillovers*” between geographically proximate high-technology firms.¹⁴² Secondly, Younge and Marx observed that although the 1985 legal change

¹³⁷ Starr, Prescott and Bishara, ‘Noncompete Agreements in the U.S. Labor Force’ (n 43) 12.

¹³⁸ Ibid 10.

¹³⁹ Johnson, Lavetti and Lipsitz, ‘Labor Market Effects 2021 Version’ (n 40) 31.

¹⁴⁰ Kenneth A Younge and Matt Marx, ‘The Value of Employee Retention: Evidence From a Natural Experiment’ (2016) 25(3) *Journal of Economics & Management Strategy* 652.

¹⁴¹ Ibid 674.

¹⁴² Ronald Gilson, ‘The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete’ (1999) 74(3) *New York University Law Review* 575.

apparently caused share prices between Michigan and its comparison states to diverge in the short term, they “*converged again in the early 1990s*”, several years after the legal change was implemented.¹⁴³ Their paper does not study this convergence further. Thirdly, their paper only reviews the effects of an NCR ban on listed public companies. Given that NCRs are thought to impede entrepreneurialism, the potential benefits of an NCR ban to new business formation were not captured.

Furthermore, a recent study by Hiraiwa, Lipsitz and Starr found that public companies do not appear to value NCRs *at all* for workers below a certain salary.¹⁴⁴ The authors studied a Washington State law implementing a \$100,000 minimum income threshold, covering 79% of workers, below which NCRs would cease to be enforceable. Washington gave advance notice of when the law would come into effect (the **effective date**). The authors theorised that if Washington businesses valued their workers having NCRs, they ought to have increased the salary of any NCR-bound workers earning slightly under \$100,000 to just above the threshold around the effective date.¹⁴⁵ The authors found no evidence of this,¹⁴⁶ and found no unusual reductions in the share price of Washington-based listed corporations after the effective date.¹⁴⁷

One potential explanation for this apparent contradiction is that Washington’s reform only applied to relatively lower-income workers, whereas Michigan’s reform also made NCRs enforceable against senior executives, in relation to whom NCR enforceability may be more valuable.¹⁴⁸ Intuitively, the costs of the holdup problem and the importance of firm-specific human capital are likely both particularly high for senior executives. Businesses benefit when their leadership teams have a complete understanding of the firm and can be trusted with

¹⁴³ Younge and Marx (n 140) 659.

¹⁴⁴ Takuya Hiraiwa, Michael Lipsitz and Evan Starr, “Do firms value court enforceability of noncompete agreements? A revealed preference approach” (Research Paper, 24 Feb 2023) <<https://ssrn.com/abstract=4364674>>.

¹⁴⁵ *Ibid* 9.

¹⁴⁶ *Ibid* 1.

¹⁴⁷ *Ibid* 31.

¹⁴⁸ *Ibid* 31-33 & 62.

this knowledge. Without an NCR, however, these executives can (threaten to) take this knowledge to a competitor. Corporations are therefore forced to choose between withholding pertinent information from executives or paying higher retention bonuses, both of which would reduce total profits.

Hiraiwa, Lipsitz and Starr point out that if NCR enforceability doesn't affect firm value at the US\$100,000 threshold, then it isn't immediately clear why firms use NCRs on workers below this threshold.¹⁴⁹ The authors provide several potential theories: Firstly, NCRs may reduce turnover even when unenforceable, since workers may not understand that an NCR isn't binding and, in effect, restrain themselves.¹⁵⁰ Secondly, "*firms may not realize that court enforceability of low-wage [NCR]s gives them value*" and investors may therefore fail to accurately price NCRs in.¹⁵¹ Thirdly, improved labour market efficiency from an NCR ban may make hiring new workers faster and cheaper,¹⁵² offsetting the firm's increased turnover at lower income levels.

Overall, the evidence regarding business profits is conflicting. Taking the results of both the Michigan and Washington studies at face value, it appears that NCRs have near-zero value to businesses until workers reach some income or seniority threshold, after which their value rises rapidly. Furthermore, there is some evidence that a blanket NCR ban would increase entrepreneurialism and the sharing of efficient practices via "*knowledge spillovers*",¹⁵³ which may best encourage long-term business profitability.

3 Effects on Consumer Prices

The economic literature on the effects of NCR on consumer prices is sparse, and the evidence is mixed. One US study found that an NCR ban reduced concentration (measured by the Herfindahl-Hirschman Index) in the physician industry, leading to greater competition

¹⁴⁹ Ibid 4.

¹⁵⁰ Ibid 29. See also Evan Starr, James Prescott and Norman Bishara, 'The behavioral effects of (unenforceable) contracts' (2020) 36(3) *Journal of Law, Economics, and Organization* 633.

¹⁵¹ Hiraiwa, Lipsitz and Starr (n 144) 33.

¹⁵² Ibid 4.

¹⁵³ Gilson (n 142).

and lower consumer prices.¹⁵⁴ Similarly, several studies have shown that reducing NCR enforceability increases entrepreneurialism, which should drive product market competition.¹⁵⁵ However, another US study found that an inter-firm agreement not to enforce NCRs in the financial services industry resulted in clients following their brokers to higher-paying (and higher-charging) firms.¹⁵⁶ The study found that clients experienced both higher consumer prices and higher levels of broker misconduct.¹⁵⁷ In light of these countervailing effects, more evidence is needed to credibly identify the effect of NCRs on consumer prices.

4 Overall US findings

In summary, the US evidence strongly suggests that reducing NCR enforceability (most obviously by banning NCRs) would increase worker wages in the aggregate. However, banning NCRs may also reduce firm profits, via the same mechanism of increasing overall job mobility. The evidence in relation to consumer prices is too sparse to draw economy-wide conclusions with any certainty.

Notably, however, multiple US studies have found that NCR bans did not significantly change hours worked,¹⁵⁸ so the effects of an NCR reform on real GDP and labour productivity are likely to be very strongly correlated.

C Applying the US Evidence to Australia

Given the substantial differences between the labour markets and existing NCR laws of Australia and the US, it is likely that the economic effects of NCRs differ in each economy in some key respects.

¹⁵⁴ Naomi Hausman & Kurt Lavetti, 'Physician Practice Organization and Negotiated Prices: Evidence from State Law Changes' (2021) 13(2) *American Economic Journal: Applied Economics* 258, 284.

¹⁵⁵ Michael Lipsitz and Mark Tremblay, 'Noncompete Agreements and the Welfare of Consumers' (Research Paper, 25 January 2022) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3975864>; Jeffers (n 52).

¹⁵⁶ Umit G Gurun, Noah Stoffman and Scott E Yonker, 'Unlocking Clients: The Importance of Relationships in the Financial Advisory Industry' (2021) 141(3) *Journal of Financial Economics* 1218, 1218.

¹⁵⁷ Ibid.

¹⁵⁸ Lipsitz and Starr (n 126) 144; Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 3.

Smaller Overall Effects on Wages and Profits

As discussed in Section IV(A)(3), fewer Australian workers than US workers are likely to take advantage of, or benefit from, the reduced impediments to job-switching provided by an NCR ban. Notwithstanding Australia's marginally higher NCR usage and enforceability levels, an Australian reform should therefore boost wages by a substantially smaller degree than the estimated 3.2%-14.2% wage increase in the US.¹⁵⁹ For the same reasons, the lost business profits from a blanket ban in Australia should be far smaller than 8.26%,¹⁶⁰ since the mechanism identified behind that reduction is increased worker turnover. However, the precise magnitudes of these effects in Australia are difficult to estimate.

Higher Risk of Low-Wage Unemployment Effects

Given Australia's relatively high minimum wage, the finding that NCRs offset the unemployment effects of raising the minimum wage warrants further investigation. This finding may explain why, contrary to the traditional assumption that NCRs are only used against managers and skilled professionals, almost 20% of Australian workers making less than \$60,000 are bound by NCRs.¹⁶¹ However, the *FWA* provides for several alternative means of encouraging business to hire and train up low-productivity workers, including junior employee rates and training arrangement rates.¹⁶² In addition, since job mobility is far lower in Australia than in the US, Australian firms may be more willing to make investments in the upskilling of workers who are not immediately productive upon being hired, since even in the absence of an NCR, they face a far lower risk of that worker leaving after being trained.

Greater Potential Benefits from Increased Entrepreneurialism

There is reason to believe that Australian consumers would benefit more from a boost to entrepreneurialism from NCR reform than US consumers. Most Australian industries are

¹⁵⁹ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 3.

¹⁶⁰ As calculated in Section IV(B)(2): Younge and Marx (n 140).

¹⁶¹ Andrews and Jarvis (n 8) 2.

¹⁶² *FWA* s 294.

more concentrated than US equivalents,¹⁶³ and both markups and market power have steadily increased in Australia for more than a decade.¹⁶⁴ Furthermore, high markups indicate that incumbent firms are already not passing on the full wage savings from NCRs, and that incumbent firms could afford to reduce prices *and* increase wages if subject to sufficient competitive pressure.

V PROPOSED REFORMS AND CONCLUSION

A Evaluation of Options for Reform

Blanket Ban

There is substantial uncertainty as to whether a blanket ban would increase real GDP in Australia due to the trade-off between wages and business profits. We can estimate whether this trade-off would increase nominal GDP by identifying the labour-business income split in Australia, and assessing whether the estimated percentage wage gains from a ban outweigh the estimated percentage profit losses. According to May 2023 ABS data, employee compensation constitutes 50.27% of total factor income, and private business profits (excluding public sector surplus and dwellings income) constitute 31.07%.¹⁶⁵ Thus, if the percentage profit reduction from a ban is more than 1.6 times higher than the percentage wage gain,¹⁶⁶ nominal GDP will decrease.

Unfortunately, the US data is inconclusive on this point. A conservative interpretation of the US evidence is that an NCR ban would increase wages by 3.2%,¹⁶⁷ and reduce business

¹⁶³ Jonathan Hambr, 'Product Market Power and its Implications for the Australian Economy' (Working Paper No 2021-03, Australian Treasury, June 2021) 5-6 <https://treasury.gov.au/sites/default/files/2021-06/p2021-177591_product_market_power_implications_0.pdf>.

¹⁶⁴ Ibid 10.

¹⁶⁵ Australian Bureau of Statistics, *Australian National Accounts: National Income, Expenditure and Product Catalogue*, March 2023) Table 7 <<https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-national-income-expenditure-and-product/latest-release#methodology>>. Ideally, we would include Gross Mixed Income (GMI), as this includes independent contractors and unincorporated businesses. However, GMI is very difficult to accurately disaggregate into labour and capital shares, so for simplicity this analysis will not include GMI.

¹⁶⁶ Since $\frac{50.27\%}{31.07\%} \approx 1.6$

¹⁶⁷ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 3.

profits by approximately 8.26%.¹⁶⁸ This gives a ratio of 2.58% profit reduction for every 1% wage gain. If that ratio held in Australia, then a ban would reduce nominal GDP. In contrast, using the more neutral 8.7% midpoint wage gain estimate from Johnson, Lavetti and Lipsitz gives a ratio of 0.95% lost profits for every 1% wage gain,¹⁶⁹ which is a clear boost in nominal GDP. On the balance of probabilities, it is likely that a blanket ban would increase nominal GDP: As discussed in Section IV(B)(2), an 8.26% reduction in profits is likely an overstatement of the long-term costs to business profits from an NCR ban. It is likely that this would also increase real GDP: As discussed in Section IV(C), Australia's more concentrated product markets make a net consumer price reduction from an NCR ban more likely than in the US.

Nonetheless, there remain considerable uncertainties surrounding a full NCR ban. As Lavetti observed during a 2020 FTC panel on NCRs, to the agreement of other experts,¹⁷⁰ economists are “[s]till far from reaching a scientific standard for concluding [NCRs] are bad for overall welfare”.¹⁷¹ Although a wealth of research has been published since Lavetti's comments, there are still major gaps in the literature as to the effects of a ban on consumer prices and aggregate long-term business profits.

Income-Threshold Ban

An income-threshold ban offers far greater certainty of a real GDP gain than a full ban, in light of US evidence that a 79th percentile income-threshold ban has *no impact* on firm valuation.¹⁷² While the overall allocative efficiency gains may be somewhat reduced, the

¹⁶⁸ As calculated in Section IV(B)(2): Younge and Marx (n 140).

¹⁶⁹ Johnson, Lavetti and Lipsitz, 'Labor Market Effects 2023 Version' (n 62) 3.

¹⁷⁰ Erik J Winton et al, 'Against the Evidence: How the FTC Cast Aside the Input of Experts at Its Own Non-Compete Workshop', *JacksonLewis* (Blog Post, 7 February 2023) <<https://www.jacksonlewis.com/insights/against-evidence-how-ftc-cast-aside-input-experts-its-own-non-compete-workshop>>.

¹⁷¹ Kurt Lavetti, 'Economic Welfare Aspects of Non-Compete Agreements' (Speech, Federal Trade Commission, 9 January 2020) 55 <https://www.ftc.gov/system/files/documents/public_events/1556256/non-compete-workshop-slides.pdf>.

¹⁷² Hiraiwa, Lipsitz and Starr (n 144).

wage gains come at a lower risk to business profits, and are more likely to be concentrated amongst low and middle-income workers.

An income-threshold ban would also protect the class of workers most vulnerable to inefficient NCRs transactions, since lower income workers are generally more likely than wealthy workers to have limited bargaining power, short-term liquidity constraints, and limited access to legal advice and representation, all of which impede the ability of workers to avoid unduly restrictive NCRs. Although there is some possible risk of low-wage unemployment rising under an income-threshold ban,¹⁷³ this risk may be mitigated by the alternative measures available under the *FWA* to businesses hoping to train up low-productivity workers.¹⁷⁴

An income threshold may somewhat reduce the likelihood and magnitude of consumer price reductions compared to a blanket ban, as many high-income NCR-bound workers would remain unable to start their own competing businesses. On the other hand, an income threshold reduces the chance that business executives with access to sensitive information or relationships might extract supra-competitive retention packages from their firms, with these additional labour costs passed on to consumers in the form of higher prices.

Status Quo

Given that an income-threshold ban appears likely to increase real GDP, maintaining the status quo appears on the balance of probabilities to be an inferior option.

B Recommended Reforms

This paper therefore recommends that Australia implement an income-threshold ban on NCRs. Though a blanket ban potentially offers higher allocative efficiency gains in the labour

¹⁷³ Lipsitz and Starr (n 126).

¹⁷⁴ *FWA* s 294(1)(b); 'Apprentices and Trainees', *Fair Work Ombudsman* (Web Page) <<https://www.fairwork.gov.au/find-help-for/apprentices-and-trainees>>.

market, its aggregate economic consequences (after factoring in the holdup effect) are highly uncertain and could possibly involve a net real GDP loss.

This paper recommends using the existing *FWA* high income threshold (currently \$167,500)¹⁷⁵ as the relevant cutoff, as this threshold has clear practical benefits. Firstly, the threshold is well understood by Australian employment lawyers, who are most likely to advise workers in restraint of trade matters.¹⁷⁶ Secondly, workers above the threshold are already denied protection against unfair dismissal under the *FWA*,¹⁷⁷ and therefore already have a stronger incentive than the most employees to seek legal advice on their worker contracts.

This threshold carries some uncertainty on account of being higher (in terms of both monetary value and income percentile) than the US\$100,000 income-threshold ban in Washington State studied by Hiraiwa, Lipsitz and Starr: When implemented on 1 January 2020, the Washington threshold was approximately equivalent to AU\$142,503¹⁷⁸ and extended to the 79th income percentile.¹⁷⁹ In comparison, Australia's 2020 high income threshold was AU\$148,700¹⁸⁰ and fell within the 92nd income percentile.¹⁸¹ As discussed in Section IV(B)(2), setting the income threshold above Washington levels increases the risk of reduced business profits from an income-threshold ban, as it could reintroduce the holdup problem amongst more senior executives. However, the *FWA* high-income threshold is only marginally above the Washington ban in terms of raw monetary value, and may still fall

¹⁷⁵ *FWA* s 382; 'High income threshold amounts', *Fair Work Ombudsman* (Web Page) <<https://library.fairwork.gov.au/viewer/?krn=K600486>>.

¹⁷⁶ Arup et al (n 74).

¹⁷⁷ *FWA* s 382.

¹⁷⁸ 'Australian Dollar (AUD) to US Dollar (USD) Historical Exchange Rates on 1st January 2020 (01/01/2020)', *Exchange Rates UK* (Web Page) <https://www.exchangerates.org.uk/AUD-USD-01_01_2020-exchange-rate-history.html>.

¹⁷⁹ Hiraiwa, Lipsitz and Starr (n 144) 3.

¹⁸⁰ 'High income threshold amounts', *Fair Work Ombudsman* (Web Page) <<https://library.fairwork.gov.au/viewer/?krn=K600486>>.

¹⁸¹ Australian Government, 'Percentile distribution of taxable individuals, by taxable income and sex, 2019–20 income year', *Data.gov.au* (Web Page, 1 August 2022) <https://data.gov.au/data/dataset/taxation-statistics-2019-20/resource/fea88652-c21c-489b-8336-35aa8e3ba2a1?inner_span=True>.

below the income threshold (if one exists) above which banning NCRs reduces profits more than it increases wages.

C Limitations and Conclusion

This paper has three key limitations: First, this paper does not examine several potentially complementary reforms that could reduce the likelihood of economically inefficient NCRs applying to workers above the income threshold. One example is mandating that firms compensate their NCR-bound former employees at some percentage of their salary for the duration of their NCRs.¹⁸² Such a requirement might reduce the incidence of unnecessary and therefore inefficient NCR usage, but conversely, might disincentivise workers from challenging their economically inefficient restraints or finding work in another industry. Another example is mandating a “prior notice” requirement for new NCRs.¹⁸³ This would ensure that firms cannot hide from workers that they will be required to sign an NCR until after they commence their employment, a tactic that is correlated with reduced wages, reduced training, and lower job satisfaction.¹⁸⁴

Second, the empirical evidence is not yet fully clear as to how an income-threshold ban at the *FWA* high income threshold would impact business profits and consumer prices. Further research into US State-level NCR bans involving even higher income thresholds (for example, the US\$150,000 income-threshold ban that DC implemented in 2022)¹⁸⁵ would greatly assist in clarifying these points. Third, this paper focuses primarily on the criterion of real GDP without explicitly considering other important economic and social factors such as wealth distribution, job security and employee satisfaction levels. Despite these limitations, an income-threshold ban is a careful and targeted reform that can be justified with far fewer assumptions in the face of uncertain evidence than a blanket ban.

¹⁸² See, eg, *Massachusetts Noncompetition Agreement Act*, Mass Gen Laws ch 149 § 24L(b)(vii) (2018).

¹⁸³ FTC Draft Rule (n 10) 3494.

¹⁸⁴ Starr, Prescott and Bishara, ‘Noncompete Agreements in the U.S. Labor Force’ (n 43) 12.

¹⁸⁵ DC Code § 32–581 (2022).